

Amendments to the Claims:

Please cancel claims 1-15 without prejudice or disclaimer and enter new claims 31-40, as set forth hereafter in the complete listing of the claims. The following listing of the claims replaces all prior claim listings.

1-30 (Cancelled).

31 (New). A method for identifying a predisposition to obesity in a human subject, which comprises determining the presence or absence of a polymorphic variation associated with obesity at position 7328 or position 9182 in a nucleotide sequence identical to SEQ ID NO: 1 or 99% identical to SEQ ID NO: 1, or in the corresponding position in the complementary sequence thereof, in a nucleic acid sample from a subject, whereby the presence of the polymorphic variation is indicative of a predisposition to obesity in the subject.

32 (New). The method of claim 31, which further comprises obtaining the nucleic acid sample from the subject.

33 (New). The method of claim 31, wherein the nucleotide sequence is identical to SEQ ID NO: 1.

34 (New). The method of claim 31, wherein the polymorphic variation is a guanine at position 7328.

35 (New). The method of claim 31, wherein the polymorphic variation is a thymine at position 9182.

36 (New). The method of claim 31, wherein the polymorphic variation is a cytosine corresponding to the position 7328 in the complementary sequence.

37 (New). The method of claim 31, wherein the polymorphic variation is an adenine corresponding to the position 9182 in the complementary sequence.

38 (New). The method of claim 31, wherein detecting the presence or absence of a polymorphic variation comprises:

hybridizing an oligonucleotide to the nucleic acid sample, wherein the oligonucleotide is complementary to the nucleotide sequence and hybridizes to a region of the nucleotide sequence that is adjacent to the polymorphic variation;

extending the oligonucleotide in the presence of one or more nucleotides, yielding extension products; and

detecting the presence or absence of the polymorphic variation in the extension products.

39 (New). The method of claim 38, wherein the oligonucleotide is wherein the oligonucleotide is selected from the group consisting of CCACACCTATTCATACTC (SEQ ID NO: 38), GTAATGCAACTTCAAAC (SEQ ID NO: 40); TGATTGCCGAGCCAGAGCA (SEQ ID NO: 61); and TTTCCATAATAGATATTTATGTAG (SEQ ID NO: 62).

40 (New). The method of claim 31, wherein the obesity is central obesity.